

AMENDMENT / RESPONSE TRANSMITTAL

Applicant : Patel, et al.
App. No. : 09/827,030
Filed : April 5, 2001
For : CLIENT INSTALLATION
AND EXECUTION SYSTEM
FOR STREAMED
APPLICATIONS
Examiner : Trenton J. Roche
Art Unit : 2124

CERTIFICATE OF MAILING

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Postal Service as first-class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

10/18/04

(Date)

John R. King
John R. King, Reg. No. 34,362

Commissioner for Patents
Mail Stop Amendment
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Transmitted herewith for filing in the above-identified application are the following enclosures:

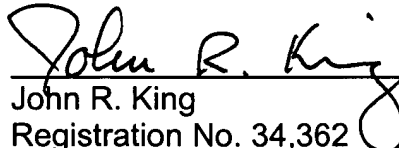
- (X) Response to June 18, 2004 Office Action in 19 pages.
- (X) Supplemental Information Disclosure Statement with PTO Form 1449 and 35 references.
- (X) Copies of three Office Actions.

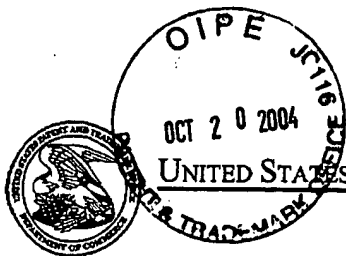
The fee has been calculated as shown below:

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FEE CALCULATION				
FEE TYPE		FEE CODE	CALCULATION	TOTAL
Total Claims	66 - 66 = 0	1202 (\$18)	0 x 0 =	\$0
Independent Claims	6 - 6 = 0	1201 (\$88)	0 x 0 =	\$0
Multiple Claim		1203 (\$300)		\$0
1 Month Extension		1251 (\$110)		\$110
2 Month Extension		1252 (\$430)		\$0
3 Month Extension		1253 (\$980)		\$0
			TOTAL FEE DUE	\$110

- (X) An extension of time is hereby requested by payment of the appropriate fee indicated above.
- (X) Fee of \$180 for the Supplemental Information Disclosure Statement.
- (X) A check in the amount of \$290 is enclosed.
- (X) Return prepaid postcard.
- (X) Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.


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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/784,699	02/14/2001	Manuel Enrique Benitez	OMN10002	3149

20995 7590 06/16/2004

KNOBBE MARTENS OLSON & BEAR LLP
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 IRVINE, CA 92614

EXAMINER

EL CHANTI, HUSSEIN A

ART UNIT

PAPER NUMBER

2157

DATE MAILED: 06/16/2004

9

Please find below and/or attached an Office communication concerning this application or proceeding.



Office Action Summary

Application No.

09/784,699

Applicant(s)

BENITEZ ET AL

Examiner

Hussein A El-chanti

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

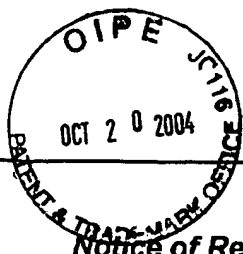
- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.



Notice of References Cited

Application/Control No.

09/784,699

Applicant(s)/Patent Under
Reexamination
BENITEZ ET AL.

Examiner

Hussein A El-chantli

Art Unit

2157

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
✓	A	US-6,687,745 B1	02-2004	Franco et al.	709/219
✓	B	US-6,735,631 B1	05-2004	Oehrke et al.	709/226
✓	C	US-6,275,496 B1	08-2001	Burns et al.	370/429
✓	D	US-6,347,398 B1	02-2002	Parthasarathy et al.	717/178
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

DETAILED ACTION

1. This action is responsive to application filed on Jan. 14, 2001. Claims 1-45 are pending examination.

Specification

2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1, 16 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "in the same manner as if" in claim 1, 16 and 31 is a relative term which renders the claim indefinite. The term "in the same manner as if" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-9, 11-14, 16 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Franco et al., U.S. Patent No. 6,687,745 (referred to hereafter as Franco).

As to claims 1, 16 and 31, Franco teaches a process, apparatus and program storage medium for intelligent server streaming of conventionally coded application programs across a computer network while concurrently executing said application programs on a client in a computer environment, comprising the steps of:

installing a portion of an application program on said client (see col. 4 lines 48-col. 5 lines 5);

providing an application server; partitioning said application program into appropriate page segments on said application server (see col. 4 lines 48-col. 5 lines 5);

wherein said application server streams said page segments to said client upon said client's request (see col. 5 lines 5-45);

executing said application program on said client; wherein the user starts said application program in the same manner as if said application program were fully installed on said client (see col. 5 lines 5-45);

wherein specific page segments are requested by said client's file system during execution of said application program (see col. 5 lines 5-45);

and storing said page segments in a cache on said client (see col. 5 lines 5-45).

As to claim 2, Franco teaches the process of claim 1, wherein said application program is not recompiled, rewritten, or rebuilt for this specific delivery mechanism (see col. 5 lines 5-45).

As to claim 3, Franco teaches the process of claim 1, wherein said client manages said cache by purging page segments that are stale or not needed (see col. 5 lines 5-45).

As to claim 4, Franco teaches the process of claim 1, wherein said client does not request page segments of said application program that already reside in said cache (see col. 5 lines 5-45).

As to claim 5, Franco teaches the process of claim 1, further comprising the step of: providing a subscription server; and wherein the user subscribes or unsubscribes to application programs with said subscription server (see col. 7 lines 62-col. 8 lines 15).

As to claim 6, Franco teaches the process of claim 1, further comprising the step of: providing a license server; and wherein said client obtains an access token for a

requested application program from said license server if the user has a valid subscription to said requested application program (see col. 25).

As to claim 7, Franco teaches the process of claim 6, wherein said access token contains an expiration tag (see col. 26 lines 23-37).

As to claim 8, Franco teaches the process of claim 6, wherein said access token is securely encrypted (see col. 25).

As to claim 9, Franco teaches the process of claim 6, wherein said client passes said access token to said application server before requesting page segments of said application program (see col. 5).

As to claim 11, Franco teaches the process of claim 1, further comprising the step of: providing a profile information database characterizing the typical page segment needs of each application program on said application server (see col. 7-col. 8).

As to claim 12, Franco teaches the process of claim 11, wherein said profile information database is updated dynamically as page segments are requested from said application server (see col. 7-col. 8).

As to claim 13, Franco teaches the process of claim 11, wherein said client prefetches page segments of said application program from said application server based on the profile information of said application program (see col. 7-col. 8).

As to claim 14, Franco teaches the process of claim 11, wherein said application server pushes page segments of said application program to said client based on the profile information of said application program (see col. 7-col. 8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oehrke et al., U.S. Patent No. 6,735,631 (referred to hereafter as Oehrke).

As to claim 10, Franco teaches a process for intelligent server streaming comprising installing a portion of an application program on said client and providing an application server (see the rejection of claim 1).

Franco does not explicitly teach the limitation "if said license server fails said client automatically switches to another license server". However Oehrke teaches a load balancing method and system where if a server fails, the system selects another server to provide the requested content (see abstract).

It would have been obvious for one of the ordinary skill in the art at the time of the invention to modify Franco by incorporating the step of switching to another server in case of a failure as taught by Oehrke because doing so would make the system more

efficient where the network of service providers always running even in the case of a server failure.

As to claim 15, Oehrke teaches the process performs load balancing among a plurality of application servers for page segment requests (see abstract).

6. Claims 17-30 and 32-45 do not teach or define any additional limitation over claims 1-16 and 31 and therefore are rejected for similar reasons.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Content Provider For Full Based Intelligent Caching System by Burns et al., U.S. Patent No. 6,275,496
- Automatic Software Downloading From A Computer Network by Parthasarathy et al., U.S. Patent No. 6,347,398

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein A El-chanti whose telephone number is (703)305-4652. The examiner can normally be reached on Mon-Fri 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (703)308-7562. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Application/Control Number: 09/784,699
Art Unit: 2157

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hussein El-chanti

June 4, 2004


ARJO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

#2

PTO/SB/08 (2-92)
Sheet 1 of 1ON DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

Docket Number 522132000200

Application Number 09/784,699

Applicant

Manuel Enrique BENITEZ et al.

Filing Date February 14, 2001

Group Art Unit 2152

Mailing Date October 3, 2003

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
HE	1.	10/30/2001	6,311,221 B1	Uri Raz et al.	709	231	
HE	2.	06/03/2003	6,574,618 B2	Dan Eylon et al.	707	1	

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO

OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title

RECEIVED

OCT 09 2003

Technology Center 2100

EXAMINER:

Hussien Chaf.

DATE CONSIDERED:

6/3/04

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

(12) **United States Patent**
Parthasarathy et al.

(10) Patent No.: **US 6,347,398 B1**

(45) Date of Patent: **Feb. 12, 2002**

(54) **AUTOMATIC SOFTWARE DOWNLOADING
FROM A COMPUTER NETWORK**

(75) Inventors: **Srivatsan Parthasarathy**, Woodinville;
Hadi Partovi, Seattle; **Benjamin W.**
Silvka, Bellevue; **Charles E. Kindel**,
Jr., Seattle, all of WA (US)

(73) Assignee: **Microsoft Corporation**, Redmond, WA
(US)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

(21) Appl. No.: **09/436,185**

(22) Filed: **Nov. 8, 1999**

Related U.S. Application Data

(63) Continuation of application No. 08/764,040, filed on Dec.
12, 1996, now abandoned.

(51) Int. Cl.⁷ **G06F 9/445**

(52) U.S. Cl. **717/11; 709/217; 709/221;
707/203**

(58) Field of Search **717/11; 709/200,
709/217, 221, 220; 707/200, 203**

(56) **References Cited**

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Wire, p06180186, Jun. 1996.*

(List continued on next page.)

Primary Examiner—Tuan Q. Dam

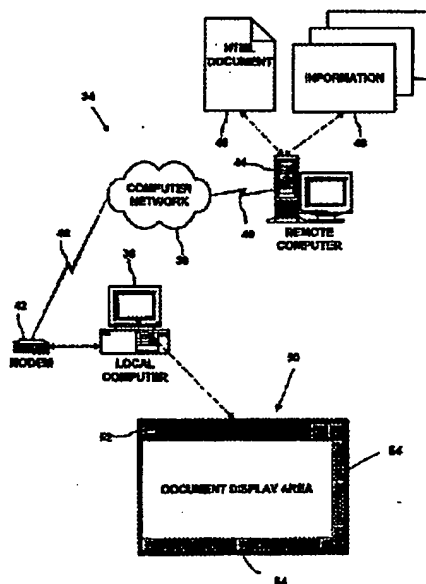
Assistant Examiner—Kelvin Booker

(74) *Attorney, Agent, or Firm*—Klarquist Sparkman LLP

(57) **ABSTRACT**

A method and system to automatically locate, download, verify, install, register and display computer software components from a computer network like the Internet or an intranet. The method and system is used to provide dynamic or interactive multimedia components in HTML documents with HTML <OBJECT> tags. The HTML <OBJECT> tags contain parameters including uniform resource locators (URLs) which reference dynamic or interactive multimedia components on remote computers. Network browsers and other applications can obtain computer software components from a computer network like the Internet or an intranet in a uniform, portable, architecture-neutral, robust manner. The computer software components obtained can be used to provide a variety of new multimedia functionality to an application program which is stored on remote computers.

65 Claims, 8 Drawing Sheets



(12) **United States Patent**
Burns et al.

(10) Patent No.: **US 6,275,496 B1**
(45) Date of Patent: **Aug. 14, 2001**

(54) **CONTENT PROVIDER FOR PULL BASED INTELLIGENT CACHING SYSTEM**

5,768,513 6/1998 Kuthyar et al. 395/200
5,790,935 8/1998 Payton 455/5.1

* cited by examiner

(75) Inventors: Gregory Burns, Carnation; Paul J. Leach, Seattle, both of WA (US)

Primary Examiner—Huy D. Vu

(74) Attorney, Agent, or Firm—Lee & Hayes, PLLC

(73) Assignee: Microsoft Corporation, Redmond, WA (US)

(57) **ABSTRACT**

A network system includes a content provider connected to local service providers via an interactive distribution network, such as the Internet. The local service providers facilitate delivery of the content from the content provider to multiple subscribers. The local service providers schedule delivery of frequently requested content from the content provider prior to a peak time when the subscribers are likely to request the content. The content is downloaded from the content provider during the off-peak hours and cached at the local service providers for serving to the subscribers during the ensuing peak time. In this manner, the frequently requested content is already present at the local service providers and ready to be served to the subscribers before they actually request it. When the content is finally requested, the data is streamed continuously in real-time for just-in-time rendering at the subscriber computer. Another aspect of this invention involves supplementing content delivery over the Internet with delivery of content over a secondary network, such as a broadcast satellite network. The supplemental broadcast link offers additional bandwidth at a fraction of the cost that would be incurred if the local service provider installed additional Internet connections, such as T1 or T3 connections.

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: 09/260,933

(22) Filed: Mar. 2, 1999

Related U.S. Application Data

(62) Division of application No. 08/703,487, filed on Aug. 26, 1996, now Pat. No. 5,991,306.

(51) Int. Cl.⁷ H04L 12/56

(52) U.S. Cl. 370/429; 709/217

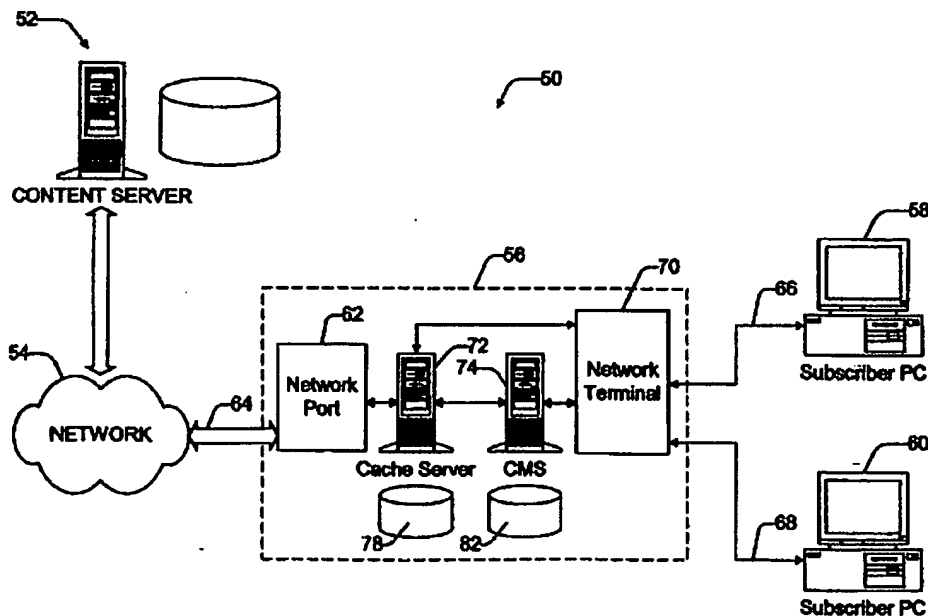
(58) Field of Search 370/252, 401, 370/310, 338, 428, 429, 412; 455/5.1; 348/7, 12; 709/217, 218, 219, 201, 202, 203

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,732,078 3/1998 Arango 370/355

2 Claims, 6 Drawing Sheets





US006735631B1

(12) **United States Patent**
Oehrke et al.

(10) Patent No.: **US 6,735,631 B1**
(45) Date of Patent: **May 11, 2004**

(54) **METHOD AND SYSTEM FOR
NETWORKING REDIRECTING**

(75) Inventors: **Terry Lee Oehrke, Lee's Summit, MO
(US); Scott Christopher Wells,
Overland Park, KS (US)**

(73) Assignee: **Sprint Communications Company,
L.P., Overland Park, KS (US)**

(*) Notice: **Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.**

(21) Appl. No.: **09/021,091**

(22) Filed: **Feb. 10, 1998**

(51) Int. Cl.⁷ **G06F 15/173**

(52) U.S. Cl. **709/226; 709/201; 709/213;
709/217; 709/220; 709/223; 709/229; 709/239**

(58) Field of Search **709/104, 105,
709/201, 232**

(56) **References Cited**

U.S. PATENT DOCUMENTS

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6,330,602 B1 • 12/2001 Law et al.

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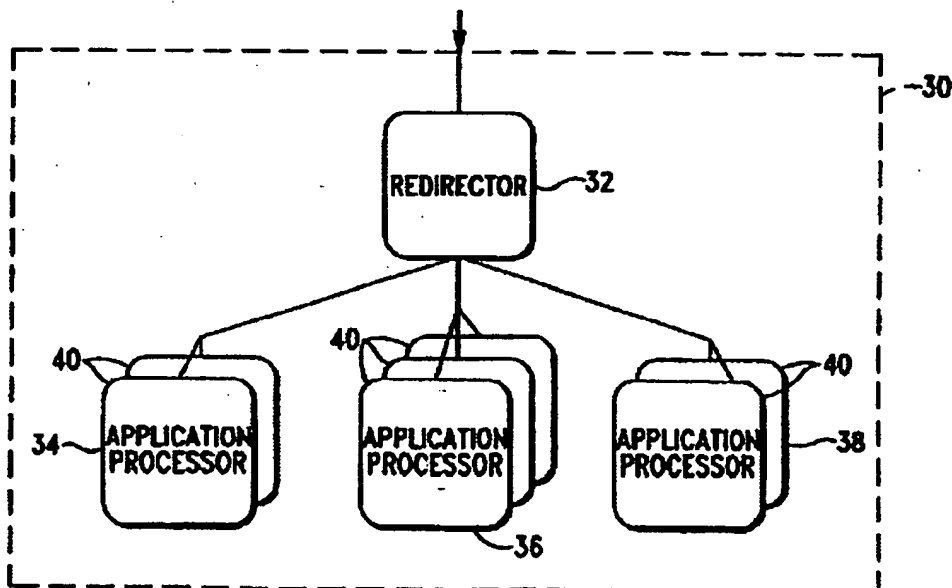
Primary Examiner—Hosain Alam

Assistant Examiner—Young N Won

(57) **ABSTRACT**

A network and method of providing near 100% availability of services is provided. According to one feature, redirectors are implemented to direct network traffic to any of two or more application processors providing the same service. The redirectors are provided in data paths at network access points and at data centers with the application processors. The redirectors re-route traffic to other application processors when one processor is unavailable and load balance between available processors. To load balance, the redirectors collect various network management statistics from the processors to determine the most responsive processor for receiving traffic. The various network management statistics are shared among the redirectors for efficient load balancing.

15 Claims, 3 Drawing Sheets



(12) **United States Patent**
Franco et al.

(10) Patent No.: **US 6,687,745 B1**
(45) Date of Patent: **Feb. 3, 2004**

(54) **SYSTEM AND METHOD FOR DELIVERING A GRAPHICAL USER INTERFACE OF REMOTE APPLICATIONS OVER A THIN BANDWIDTH CONNECTION**

(75) Inventors: **Louis M. Franco**, Hoboken, NJ (US);
Frank Leon Rose, Brooklyn, NY (US);
Philip S. J. Brittan, Brooklyn, NY (US);
Mark Cunningham, Brooklyn, NY (US);
Alex Bulkin, Brooklyn, NY (US);
Mat Baskin, Bronx, NY (US);
Greg Blonder, Summit, NJ (US)

(73) Assignee: **Droplet, Inc.**, New York, NY (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 516 days.

(21) Appl. No.: **09/599,382**

(22) Filed: **Jun. 22, 2000**

Related U.S. Application Data

(60) Provisional application No. 60/153,917, filed on Sep. 14, 1999.

(51) Int. Cl.⁷ **G06F 15/16**

(52) U.S. Cl. **709/219**

(58) Field of Search **709/203, 202, 709/213, 217**

(56) References Cited

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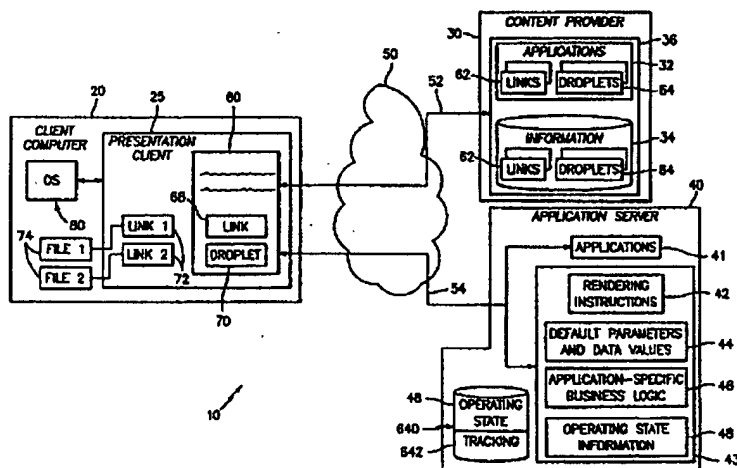
Primary Examiner—David Y. Eng

(74) Attorney, Agent, or Firm—Brown Raysman Millstein Felder Steiner

(57) ABSTRACT

A method and system are disclosed for delivering interactive links for presenting applications and second information at a client computer from remote sources in a network-configured computer processing system. In one embodiment, the method includes retrieving over a first communication connection, in response to a request of a client computer, informational content having computer program code embedded therein, and executing the embedded computer program code for establishing a second communication connection to an application server. The method further includes retrieving over the second communication connection first information including presentational information for presenting the application and the second information. The method also includes presenting the application and the second information based upon the presentational information, and storing on the client computer an interactive link for selectively re-establishing the second communication connection to the application server for retrieving the first information and presenting the application and the second information on an as-needed basis. Preferably, the storing of the interactive link includes downloading a graphical representation of the interactive link and storing a file containing information representing an operating environment of the client computer and a network address of the application server.

26 Claims, 8 Drawing Sheets





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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,260	05/15/2001	Lucky Vasant Shah	OMNI0003	1711
7590 09/07/2004				
GLENN M. KUBOTA		EXAMINER		
MORRISON & FOERSTER LLP		LIN, KENNY S		
555 WEST FIFTH STREET				
SUITE 3500		ART UNIT		
LOS ANGELES, CA 90013-1024		2154		

DATE MAILED: 09/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/858,260

Applicant(s)

SHAH ET AL.

Examiner

Kenny Lin

Art Unit

2154

2

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 May 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-96 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-96 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/6/2003.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. Claims 1-96 are presented for examination.
2. The IDS submitted on October 6, 2003 have been considered by the examiner.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 9-11, 21-23, 33-35, 37-48, 57-59, 69-71, 81-83 and 85-96 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The following terms lack proper antecedence basis:

- i. Claims 9, 21, 33, 45, 57, 69, 81 and 93, "the root directory" (i.e., the root directory was never introduced in the previous claims);
- ii. Claims 11, 23, 35, 47, 59, 71, 83 and 95, "the new root directory" (i.e., the new root directory was never introduced in the previous claims);

b. The following terms contain errors:

- i. Claim 37, line 5 – a user mode client (i.e., do you mean "a user-mode client", please be consistent with the terms throughout the claims);
- ii. Claim 85, line 5 – a user mode client (i.e., do you mean "a user-mode client", please be consistent with the terms throughout the claims).

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

6. Claims 1-4, 13-16, 25-28, 37-40, 49-52, 61-64, 73-76 and 85-88 are rejected under 35 U.S.C. 102(e) as being anticipated by Schmeidler et al (hereafter Schmeidler), US 6,374,402.

7. As per claims 1 and 49, Schmeidler taught the invention as claimed including a process for client-side retrieval, storage, and execution of application programs and other related data streamed from a server across a computer network to a client system in a computer environment, comprising the steps of:

- a. Providing a streaming file system on said client (col.2, lines 29-34, col.8, lines 28-33, col.9, lines 11-12, col.10, lines 22-30);

- b. Wherein said streaming file system appears to said client to contain the installed application program (col.3, lines 2-11, col.10, lines 22-30);
- c. Wherein said streaming file system receives all requests from local processes for application program code or data that are part of the application (col.10, lines 39-59, col.16, lines 39-45);
- d. Providing a persistent cache on said client (col.16, lines 14-33, col.17, lines 18-25);
- e. Wherein said streaming file system satisfies requests for application program code or data by retrieving it from said persistent cache stored in a native file system or by retrieving it directly from said server (col.2, lines 57-67, col.10, lines 39-65, col.11, lines 30-36, col.16, lines 14-49, col.17, lines 33-41); and
- f. Wherein application program code or data retrieved from said server is placed in said persistent cache for reuse (col.16, lines 14-33, col.17, lines 18-25).

8. As per claims 13 and 61, Schneidler taught the invention as claimed including a process for client-side retrieval, storage, and execution of application programs and other related data streamed from a server across a computer network to a client system in a computer environment, comprising the steps of:

- a. Providing a kernel-mode streaming file system driver on said client (col.2, lines 29-34, col.9, lines 11-12, col.10, lines 22-30);
- b. Providing a user-mode client on said client (col.10, lines 39-59, col.11, lines 17-29);

- c. Wherein said streaming file system receives all requests from local processes for application program code or data that are part of the application (col.10, lines 39-59, col.11, lines 17-29, col.16, lines 39-45);
- d. Providing a persistent cache on said client (col.16, lines 14-33, col.17, lines 18-25);
- e. Wherein requests made to said streaming file system are directed to said user-mode client or retrieved from said persistent cache (col.10, lines 6-10, 39-59, col.14, lines 16-67, col.15, lines 1-40);
- f. Wherein said user-mode client handles the application program code and data streams from said server and sends the results back to said streaming file system driver (col.10, lines 39-65, col.11, lines 30-36, col.14, lines 16-67, col.15, lines 1-40); and
- g. Wherein application program code or data retrieved from said server is placed in said persistent cache for reuse (col.16, lines 14-33, col.17, lines 18-25).

9. As per claims 25 and 73, Schmeidler taught the invention as claimed including a process for client-side retrieval, storage, and execution of application programs and other related data streamed from a server across a computer network to a client system in a computer environment, comprising the steps of:

- a. Providing a streaming block driver on said client (col.9, lines 11-12, col.10, lines 22-30, col.16, lines 9-33);

- b. Wherein said block driver provides the abstraction of a physical disk to a native file system already installed on the client operating system (col.10, lines 22-30, 39-66, col.11, lines 37-48, col.16, lines 9-33);
- c. Providing a persistent cache on said client (col.16, lines 14-33, col.17, lines 18-25);
- d. Wherein said block driver receives requests for physical block reads and writes from local processes which it satisfies out of said persistent cache on a standard file system that is backed by a physical disk drive (col.10, lines 39-59, col.16, lines 39-45, col.14, lines 16-67, col.15, lines 1-40, col.16, lines 9-49); and
- e. Wherein requests that cannot be satisfied by said persistent cache are sent to said server (col.10, lines 39-65, col.11, lines 30-36, col.16, lines 42-57).

10. As per claims 37 and 85, Schmeidler taught the invention as claimed including a process for client-side retrieval, storage, and execution of application programs and other related data streamed from a server across a computer network to a client system in a computer environment, comprising the steps of:

- a. Providing a disk driver on said client (col.2, lines 29-34, col.9, lines 11-12, col.10, lines 22-30);
- b. Providing a user-mode client on said client (col.10, lines 39-59, col.11, lines 17-29);

- c. Wherein said disk driver sends all file requests that it receives to said user-mode client (col.10, lines 6-10, 39-59, col.11, lines 17-29, col.14, lines 16-67, col.15, lines 1-40);
- d. Providing a persistent cache on said client (col.16, lines 14-33, col.17, lines 18-25); and
- e. Wherein said user-mode client attempts to satisfy said file requests from said program cache or by making requests from said server (col.10, lines 39-65, col.11, lines 30-36, col.14, lines 16-67, col.15, lines 1-40, col.16, lines 9-49).

11. As per claims 2, 14, 26, 38, 50, 62, 74 and 86, Schmeidler taught the invention as claimed in claims 1, 13, 25, 37, 49, 61, 73 and 85. Schmeidler further taught said persistent cache is encrypted with a key not permanently stored on said client to prevent unauthorized use or duplication of application code or data; and wherein said key is sent to said client upon application startup from said server and said key is not stored in the application program's persistent storage area in said persistent cache (col.2, lines 47-55, col.9, lines 52-67, col.10, lines 1-8, col.16, lines 33-36, col.22, lines 45-67, col.23, lines 1-19).

12. As per claims 3, 15, 27, 39, 51, 63, 75 and 87, Schmeidler taught the invention as claimed in claims 1, 13, 25, 37, 49, 61, 73 and 85. Schmeidler further taught said client initiates the prefetching of application program code and data from said server (col.15, lines 14-16); and wherein said client inspects program code or data file requests and consults the contents of said persistent cache as well as historic information about application program fetching patterns and

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uses this information to request additional blocks of application program code and data from said server that said client expects will be needed soon (col.15, lines 9-40).

13. As per claims 4, 16, 28, 40, 52, 64, 76 and 88, Schmeidler taught the invention as claimed in claims 1, 13, 25, 37, 49, 61, 73 and 85. Schmeidler further taught said server initiates the prefetching of application program code and data for said client; and wherein said server examines the patterns of requests made by said client and selectively returns to said client additional blocks that said client did not request but is likely to need soon (col.15, lines 9-40).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 5, 17, 29, 41, 53, 65, 77 and 89 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmeidler, in view of Braun et al (hereafter Braun), US 6,636,961.

16. As per claims 5, 17, 29, 41, 53, 65, 77 and 89, Schmeidler taught the invention substantially as claimed in claims 1, 13, 25, 37, 49, 61, 73 and 85. Schmeidler further taught wherein unmodified files are retrieved from said server (col.2, lines 57-67, col.10, lines 39-65, col.17, lines 33-41). Schmeidler did not specifically teach the step of:

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19. As per claims 6, 18, 30, 42, 54, 66, 78 and 90, Schmeidler taught the invention substantially as claimed in claims 1, 13, 25, 37, 49, 61, 73 and 85. Schmeidler further taught the step of:

- a. Wherein said streaming file system is a copy-on-write file system that allows applications to write configuration or initialization files where they want to without rewriting the application, and without disturbing the local customization of other clients (col.16, lines 25-33, col.17, lines 1-37);
- b. Wherein each block of data in said persistent cache is marked as clean or dirty (col.16, lines 53-63, data wish to retain and data unwanted);
- c. Wherein pages marked as dirty have been customized by the application program and cannot be removed from the cache without losing client customization (col.16, lines 53-63, write-through tagged);
- d. Wherein pages marked as clean may be purged from the cache because they can be retrieved again from said server (col.16, lines 53-63).

20. Schmeidler did not specifically teach o provide a cache index wherein said cache index indicates which pages in said persistent cache are clean and dirty; and wherein said copy-on-write file system references said cache index to determine if a page is clean or dirty. However, Schmeidler's teaching of tagging each individual file and data with a write-through tag as references indicating whether the file is clean or dirty contribute the similar functionalities as using the claimed cache index. It would have been obvious to one of ordinary skill in the art at

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the time the invention was made to combine the teachings of Schmeidler and further uses tagging technique in identifying the marked files instead of a cache index method.

21. Claims 7, 19, 31, 43, 55, 67, 79 and 91 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmeidler, in view of Kelly et al (hereafter Kelly), US 5,210,850.

22. As per claims 7, 19, 31, 43, 55, 67, 79 and 91, Schmeidler taught the invention substantially as claimed in claims 1, 13, 25, 37, 49, 61, 73 and 85. Schmeidler did not specifically teach the steps of: marking specific files in said persistent cache as not modifiable; wherein said streaming file system does not allow any data to be written to said specific files that are marked as not modifiable; and wherein attempts by any processes to mark any of said specific files as modifiable will not succeed. However, it would have been obvious for an authorized one to make files in cache write protected. Kelly taught that specific files in the persistent cache can be set to be write protected where modification to the file is not allowed (col.4, lines 36-49). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schmeidler and Kelly because Kelly's teaching of setting write protected status protects the files in Schmeidler's system from accidental over writes.

23. Claims 8, 20, 32, 44, 56, 68, 80 and 92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmeidler, in view of Blumenau, US 6,510,462.

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24. As per claims 8, 20, 32, 44, 56, 68, 80 and 92, Schmeidler taught the invention substantially as claimed in claims 1, 13, 25, 37, 49, 61, 73 and 85. Schmeidler further taught to provide checksums of application code and data (col.16, lines 5-8). Schmeidler did not specifically teach the steps of:

- a. Maintaining checksums of application code and data in said persistent cache;
- b. Wherein when a block of code or data is requested by a local process said streaming file system computes the checksum of the data block before it is returned to the local process; and
- c. Wherein if a computed checksum does not match the checksum stored in said persistent cache the cache entry is invalidated and a fresh copy of the page is retrieved from said server.

25. Blumenau taught to use checksums of a streamed application code from a cache, compare the checksum to a reference checksum to see if they matches or not, and to determine the use of the application code according the to comparison (abstract, col.2, lines 42-67, col.3, lines 1-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schmeidler and Blumenau because Blumenau's teaching of using checksum helps Schmeidler's system to ensure that the proper application code or data requested is retrieved.

26. Claims 9, 21, 33, 45, 57, 69, 81 and 93 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmeidler, in view of Carothers et al (hereafter Carothers), US 6,587,857.

27. As per claims 9, 21, 33, 45, 57, 69, 81 and 93, Schmeidler taught the invention substantially as claimed in claims 1, 13, 25, 37, 49, 61, 73 and 85. Schmeidler did not specifically teach the steps of:

- a. Assigning each file in an application program a unique identifier;
- b. Wherein files that are changed or added in an application upgrade are given new identifiers never before used for that application program;
- c. Wherein files that are unchanged retain the same number; and
- d. Wherein directories whose contents change are also considered change. If any file changes, this will cause its parent to change, all the way up to the root directory.

28. Carothers taught to assign unique identifiers to each files, assign new unique identifiers when the files are changed, and retain same identifier for unchanged files (col.6, lines 30-34, col.7, lines 27-31, col.8, lines 23-36, col.9, lines 48-53). Carothers further taught that contents change are also considered change for directories (col.7, lines 27-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schmeidler and Carothers because Carothers' teaching of using unique identifiers for each file help Schmeidler's system to assign version identifications for the files of the application program for easy version management.

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29. Claims 10-11, 22-23, 34-35, 46-47, 58-59, 70-71, 82-83 and 94-95 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmeidler and Carothers as applied to claims 9, 21, 33, 45, 57, 69, 81 and 93 above, and further in view of Mohammed, US 6,418,555.

30. As per claims 10, 22, 34, 46, 58, 70, 82 and 94, Schmeidler and Carothers taught the invention substantially as claimed in claims 9, 21, 33, 45, 57, 69, 81 and 93. Schmeidler and Carothers did not specifically teach when an application upgrade occurs said client is given a new root directory for the application program by said server; wherein said new root directory is used by said streaming file system to search for files in the application program; wherein files that do not change can be reused from said persistent cache without downloading them again from said server; and wherein files with new identifiers are retrieved from said server. Mohammed taught to invoke upgrades and store files in the application program in a separate storage media (col.2, lines 47-49) and wherein files that do not change can be reused from said persistent cache without downloading them again from the server and retrieve new files from the server (col.2, lines 60-67, col.3, lines 1-9, col.4, lines 19-49, col.6, lines 29-37, 42-45). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schmeidler, Carothers and Mohammed because Mohammed's teaching of upgrading application help Schmeidler and Carothers' system to automatically detect new versions of application program and perform automatic upgrades (see Mohammed, col.1, lines 31-43, col.2, lines 52-58, col.7, lines 11-16).

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31. As per claims 11, 23, 35, 47, 59, 71, 83 and 95, Schmeidler and Carothers taught the invention substantially as claimed in claims 9, 21, 33, 45, 57, 69, 81 and 93. Schmeidler and Carothers did not specifically teach said application upgrades can be marked as mandatory by said server causing the new root directory for the application program to be used immediately; and wherein said streaming file system contacts said server when an application program is started in order to receive any application upgrades. Mohammed taught to bypass user interaction during application upgrades and store files in the application program in a separate storage media (col.2, lines 47-49, col.5, lines 12-16) and said streaming file system contacts the server when an application program is started in order to receive any application upgrades (col.2, lines 64-67, col.3, lines 1-4, col.6, lines 18-23, 46-59). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schmeidler, Carothers and Mohammed because Mohammed's teaching of upgrading application help Schmeidler and Carothers' system to automatically detect new versions of application program and perform automatic upgrades (see Mohammed, col.1, lines 31-43, col.2, lines 52-58, col.7, lines 11-16).

32. Claims 12, 24, 36, 48, 60, 72, 84 and 96 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmeidler, in view of Metz et al (hereafter Metz), US 5,666,293.

33. As per claims 12, 24, 36, 48, 60, 72, 84 and 96, Schmeidler taught the invention substantially as claimed in claims 1, 13, 25, 37, 49, 61, 73 and 85. Schmeidler did not specifically teach said server broadcasts an application program's code and data and any client

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that is interested in that particular application program stores the broadcasted code and data for later use. Metz taught to broadcast application program codes and any client that is interested in the particular application program stores the broadcasted code and data for later use (col.4, lines 39-56, col.5, lines 5-15, 51-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Schmeidler and Metz because Metz's teaching of broadcasting application enables all the users of Schmeidler's system to obtain the desired application code or data for upgrades.

Conclusion

34. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Eylon et al, US 2001/0034736.

Willems, US 6,694,510.

Saboff, US 6,154,878.

Chernock et al, US 6,772,209.

Delo et al, US 6,370,686.

35. A shortened statutory period for reply to this Office action is set to expire **THREE MONTHS** from the mailing date of this action.

36. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenny Lin whose telephone number is (703) 305-0438. The examiner can normally be reached on 8 AM to 5 PM Tue.-Fri. and every other Monday..

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksl

September 3, 2004

Allen Jan L
9/3/04

Notice of References Cited	Application/Control No. 09/858,260	Applicant(s)/Patent Under Reexamination SHAH ET AL.	
	Examiner Kenny Lin	Art Unit 2154	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,374,402 B1	04-2002	Schmeidler et al.	717/167
	B	US-5,210,850 A	05-1993	Kelly et al.	710/220
	C	US-6,510,462 B2	01-2003	Blumenau, Trevor	709/224
	D	US-6,418,555 B2	07-2002	Mohammed, Mannan A.	717/169
	E	US-6,587,857 B1	07-2003	Carothers et al.	707/102
	F	US-6,636,961 B1	10-2003	Braun et al.	713/1
	G	US-5,666,293	09-1997	Metz et al.	709/220
	H	US-6,694,510 B1	02-2004	Willems, Richard A.	717/124
	I	US-6,154,878 A	11-2000	Saboff, Michael L.	717/173
	J	US-6,772,209 B1	08-2004	Chernock et al.	709/225
	K	US-6,370,686 B1	04-2002	Delo et al.	717/174
	L	US-2001/0034736	10-2001	Eylon et al.	707/200
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
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	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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Form PTO-1449

Docket Number 522132000600

Application Number 09/858,260

INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

Applicant

Lucky Vasant SHAH et al.

Filing Date May 15, 2001

Group Art Unit 2121

Mailing Date October 3, 2003

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
7/1	1.	10/30/2001	6,311,221 B1	Uri Raz et al.			
7/1	2.	06/03/2003	6,574,618 B2	Dan Eylon et al.			

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO

OTHER DOCUMENTS

(Including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title

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EXAMINER:

Kerry Zi

DATE CONSIDERED:

9/1/04

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,607	04/05/2001	Sanjay Pujare	OMNI0005	4038
20995	7590	10/06/2004	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			SHIN, KYUNG H	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			2143	

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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OCT 12 2004

KNOBBE, MARGENS, OLSON & BEAR, LLP

Office Action Summary	Application No.	Applicant(s)	
	09/826,607	PUJARE ET AL.	
	Examiner	Art Unit	
	Kyung H Shin	2143	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/6/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responding to application papers dated 4/5/2001
2. Claims 1-39 are pending. Independent claims are 1, 14 and 27.

Claim Rejections – 35 USC § 102

3. The following is a quotation of appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-8, 13-21, 26-34 and 39 are rejected under 35 U.S.C. 102(e) as being unpatentable over **Cheng et al.** (US Patent No. 6,457,076: System and method for modifying software residing on a client computer that has access to a network, Filed on Sep. 13, 2000).

Regarding Claims 1, 14, 27, Cheng discloses a process, apparatus, method for converting a conventionally coded computer application program into a data set suitable for streamed delivery across a network from a server and concurrent execution on a client in a computer environment, comprising the steps of:

providing installation monitoring means for monitoring the installation process of said conventionally coded application program on a local computer system; (see col. 8, lines 62-66)

wherein said installation monitoring means monitors the modifications that said installation process makes to the system registry of said local computer system and records the system modification data; (see col. 9, lines 6-10 where tracks changes made to registry (reference's configuration) data.)

wherein said installation monitoring means monitors and records any file modifications made by said installation process; (see Fig.11; col. 9, lines 10-16, where records (reference's archives) changes made)

sorting said system modification data and said file modification data and removing duplicate entries; (see col. 9, lines 33-38 where GUI for list of updates and ability to delete entries even a duplicate entry)

parameterizing all of said local computer system's specific registry keys, value names, and values in said system modification data and said file modification data; (see col. 14, lines 8-15; col. 14, lines 38-41 where registry (i.e. configuration) keys in modification data) and

providing data set creation means for processing said parameterized system modification data and said parameterized file modification data to create a data set suitable for streaming over said network. (see col. 15, lines 15-23)

Art Unit: 2143

Regarding Claims 2, 15, 28, Cheng discloses the process, apparatus, method of claim 1, wherein said data set creation means creates a runtime data set, said runtime data set consists of all regular application files and directories containing information about said regular application files. (see col. 10, lines 55-59)

Regarding Claims 3, 16, 29, Cheng discloses the process, apparatus, method of claim 2, wherein said data set creation means creates an initialization data set that is the first set of data streamed from said server to said client, said initialization data set prepares said client for streaming of said runtime data set. (see col. 15, lines 21-24; col. 15, lines 32-36)

Regarding Claims 4, 17, 30, Cheng discloses the process, apparatus, method of claim 2, wherein said directories contain lists of file names, file numbers, and the metadata associated with the files in a particular directory. (see col. 3, lines 19-25)

Regarding Claims 5, 18, 31, Cheng discloses the process, apparatus, method of claim 1, wherein said data set creation means creates a versioning table that contains a list of root file numbers and version numbers for tracking application patches and upgrades, and wherein each entry in said versioning table corresponds to one patch level of an application with a corresponding new root directory. (see col. 10, lines 26-32)

Regarding Claims 6, 19, 32, Cheng discloses the process, apparatus, method of claim

5, wherein said versioning table is sent to said client by said server, said client compares said versioning table with said client's root file number for the particular application program to find the necessary files required for a software upgrade or patch. (see col. 3, lines 53-59 where it determines files required for installation.)

Regarding Claims 7, 20, 33, Cheng discloses the process, apparatus, method of claim 1, further comprising the step of: providing a user interface that allows an operator to examine all changes made to said local computer system during said installation process and to edit said system modification data and said file modification data. (see col. 9, lines 32-42 where GUI to examine installation data)

Regarding Claims 8, 21, 34, Cheng discloses the process, apparatus, method of claim 1, wherein said installation monitoring means monitors said application program as it runs and is being configured for a particular working environment on said local computer system and records common configurations of said application program thereby allowing said common configurations to be automatically duplicated on other client machines. (see col. 10, lines 55-59; Application configuration data and installation files is downloaded; setup can be duplicated on multiple machines)

Regarding Claims 13, 26, 39, Cheng discloses the process, apparatus, method of claim 1, wherein said installation monitoring means records the state of said local computer system before said installation process begins to give a more accurate picture

of any modifications that are observed by said installation monitoring means. (see col. 3, lines 53-54: System state is saved before installation process)

Claim Rejection – 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 9-11, 22-24, 35, 36 and 37** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Cheng et al. (US Patent No. 6,457,076)** in view of **Eylon et al. (US Patent No. 6,574,618: Method and system for executing network streamed application).**

Cheng discloses an application installation apparatus which monitors the installation process, logs installation modifications and events, and saves the system's initial state before installation. (see Cheng col. 15, lines 37-41: *"Installation 212 is monitored by the install monitor.... The install monitor 910 documents the state of the client computer 101 prior to installation and the changes made during the installation of a software update."*)

Regarding Claims 9, 22, 35, Cheng does not disclose the process program profile by capturing a sequence of file blocks. However, Eylon discloses the process, apparatus,

method of claim 1, further comprising the step of: program profiling means for capturing the sequence of file blocks being accessed during normal execution of said application program. (see col. 4, lines 37-42: Profile an application program for later optimization of processing)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng to profile a program by capturing and analyzing a sequence of file blocks during execution as taught by Eylon. One of ordinary skill in the art would be motivated to employ the invention of Eylon in order to improve and enhance the techniques used in the installation and monitoring of application installations over a network environment. (see Eylon col. 3, lines 3-4: *"...an improved technique of delivering applications to a client for local execution has been developed."*)

Regarding Claims 10, 23, 36, Cheng does not disclose process where the pre-captured block are used for cache purposes. However, Eylon discloses the process, apparatus, method of claim 9, wherein said sequence of file blocks is used to pre-cache frequently used blocks on said client before said application program is first used by a user. (see col. 4, lines 42-50: Load blocks into cache)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng to cache frequently used data blocks as taught by Eylon. One of ordinary skill in the art would be motivated to employ the invention of Eylon in order to enhance the application installation and monitoring capabilities in a network. (see Eylon col. 3, lines 3-4: *"...an improved technique of delivering*

applications to a client for local execution has been developed.")

Regarding Claims 11, 24, 37, Cheng does not disclose process where the pre-captured block are used to optimize for faster file access with large directories. However, Eylon discloses the process, apparatus, method of claim 9, wherein said sequence of file blocks is used to optimize large directories of files on said client for faster file accesses. (see col. 3, lines 52-56: Pre-load data to optimize file access.) It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng reduce time required for file access from large directories as taught by Eylon. One of ordinary skill in the art would be motivated to modify Cheng to employ the invention of Eylon in order to improve the techniques for the installation of applications over a network environment. (see Eylon col. 3, lines 3-4: "...an improved technique of delivering applications to a client for local execution has been developed.")

Regarding Claims 12, 25, 38, Cheng does not disclose process where the pre-fetched block are acquired based on user input. However, Eylon discloses the process, apparatus, method of claim 9, wherein said sequence of file blocks is tied to specific user input and wherein said client pre-fetches file blocks based on user input to said application program. (see col. 5, line 65 - col. 6, line 3: Pre-loads file blocks)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cheng pre-fetch application file blocks based on user input as taught by Eylon. One of ordinary skill in the art would be motivated to modify

Cheng to employ the invention of Eylon in order to enhance the techniques for the installation of applications over a network. (see Eylon col. 3, lines 3-4: "...an improved technique of delivering applications to a client for local execution has been developed.")

Contact Information

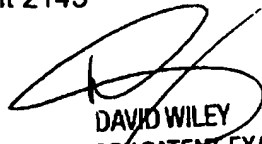
7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kyung H Shin whose telephone number is 703-305-0711. The examiner can normally be reached on 9 am - 7 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David A Wiley can be reached on 703-308-5221. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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KHS

Kyung H Shin
Patent Examiner
Art Unit 2143


DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Application/Control Number: 09/826,607
Art Unit: 2143

Page 10

KHS
Sep. 22, 2004

Form PTO-1449

Docket Number 522132000300

Application Number 09/826,607

INFORMATION DISCLOSURE CITATION
IN AN APPLICATION

(Use several sheets if necessary)

Applicant

Sanjay PURARE et al.

Filing Date April 5, 2001

Group Art Unit ~~2143~~

Mailing Date October 3, 2003

2143

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
KHS	1.	10/30/2001	6,311,221 B1	Uri Raz et al.	109	231	Jul 22, 98
KHS	2.	06/03/2003	6,574,618 B2	Dan Eylon et al.	109	1	Dec 28, 2000

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO

OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

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Notice of References Cited

Application/Control No.

09/826,607

Applicant(s)/Patent Under
Reexamination
PUJARE ET AL.

Examiner

Kyung H Shin

Art Unit

2143

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-6,457,076	09-2002	Cheng et al.	710/36
	B	US-6,574,618	06-2003	Eylon et al.	707/1
	C	US-6,282,712	08-2001	Davis et al.	717/170
	D	US-6,418,554	07-2002	Delo et al.	717/174
	E	US-			
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